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ABSTRACT

A study was undertaken to examine the relationship between use of Seaver Science Library at the University of Southern California and selected personal characteristics of students in four science classes (two undergraduate, two graduate), selected from those courses for which materials were on reserve at Seaver library. A questionnaire was administered to the four classes during class time, and the 162 usable responses were analyzed statistically on an IBM 360 computer. Results proved use of Seaver library to be highly course related and showed a strong correlation between class standing and increased use of books, journals, indexes and abstracts, reference service, and card catalog. The statistical data has been presented in numerous tables, and the appendix includes the questionnaire and a bibliography. (Author/LS)

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THE RELATIONSHIP BETWEEN USE OF THE SEAVER SCIENCE LIBRARY OF THE UNIVERSITY OF SOUTHERN CALIFORNIA AND SELECTED PERSONAL CHARACTERISTICS OF THE STUDENT POPULATION

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by

Shirley Joyce McFall

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THE PROBLEM

BACKGROUND

The library, in today's society, must meet the needs of its community in order to remian a functional entity. This is nowhere more true than for an academic library, whose existance stems from that of the college or university to which it belongs. Its policies, collections, and services must meet the needs generated by the curriculum and the demands made by students.

> Concisely stated, the function of the university library is "to collect and make available for use books, pamphlets, broadsides, manuscripts, etc., needed for the teaching, public service, and research programs of the university."[1]
>
> It is the aim of all college and university librarians to provide library service and materials commensurate with the curriculum being offered.[2]
>
> The library cannot and should not exist in isolation from the rest of the community.[3]
>
> The university library's public is made up of professors, students, scholars in other institutions, and members of the community at large . . . The general purposes of a university which are basic in any time and place are really two: 1) the training of students in intellectual and professional studies at the undergraduate level, and 2) research and graduate study.[4]

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[1]Lois C. Bailey. "The Role of the College and University Library in the Fields of the Humanities and Social Sciences." The Role of the Library in Collecting Information and Giving Service to the Serious Student and Research Worker. (Austin, Texas: University of Texas, Graduate School of Library Science, 1954), p. 78.

[2]Mary Wurster. "Introduction." Use, Mis-use, and Non-use of Academic Libraries. (n.p.: New York Library Association, 1970), p. 1.

[3]Lynne A. Burgess. "Motivation: The Key to Non-use of the Academic Library." Use, Mis-use, and Non-use of the Academic Library. (n.p.: New York Library Association, 1970), p. 25.

[4]Ralph W. McComb. "The Role of the College and University

In order to determine the extent to which their operation has satisfied the needs of their users, many libraries have resorted to surveys of one kind or another. Circulation records have been used as a basis of the evaluation of service. The number of books actually checked out is used to determine the quality of library service available--the rationale being that if the services are good, more people will come in and check out books. However, circulation figures alone are not a good indicator of actual use of the library; they do not reflect the use of materials that are not checked out.

> Circulation statistics are convenient and they have their uses, but they fall far short of serving as a reliable index to the utility of the library.[5]

The failing of circulation statistics is that "in-house" use of materials is totally ignored, as well as use of other available services, such as reference service, the card catalog, indexes and abstracts, etc.

> In a recent study, it can be extrapolated with some measure of accuracy that for every book borrowed, five books and/or journals are used in the library, along with a number of other types of uses to which a library is put. On that basis, a person may use the library without ever borrowing a single book. Therefore the equation of circulation records to library use cannot really be considered a justifiable or accurate quantification to library use or non-use.[6]

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[5]Leon Carnovsky. "The Public Library and the Serious Reader." The Role of the Library in Collecting Information and Giving Service to the Serious Student and Research Worker. (Austin, Texas: University of Texas, Graduate School of Library Science, 1954), p. 13.

[6]John Lubans, Jr. "On Non-use of an Academic Library: A Report of Findings." Use, Mis-use, and Non-use of Academic Libraries. (n.p.: New York Library Association, 1970), p. 51.

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In order to quantify total library use, some librarians have kept statistics on the number of books and periodicals left on tables, catalog use assistance, reference questions, and interlibrary loan requests. These statistics also lack reliability. Had all the books left on the table actually been used? Should all reference questions, regardless of difficulty and amount of time needed to answer them, be weighted equally?

As a further step in determining just who uses the library and why, a number of librarians have individualized data gathering by using questionnaires and/or interviews. Academic librarians have often surveyed patrons in order to ascertain frequency of use for assigned reading, problems, stack use, study, general reading, newspapers, periodicals, and returning books.

NEED FOR RESEARCH

A library cannot accurately evaluate its role and effectiveness, however, by surveying only those people who already use the library. It is necessary to determine the needs and information gathering patterns of all potential users, which, including non-users, could possibly identify shortcomings in library policies and services, as well as suggest desirable improvements.

> Non-use has not been adequately treated in the literature nor has there been research in this area. Essentially, most studies of library users are based on people who happen to come into the library or circulation records. The studies generally concentrate on what the users do in the library, not how well, or for that matter, for what purpose they use it or how successful they are. Quite often, the reports relate the number of books borrowed versus the student's academic standing.[7]

[7]Ibid., p. 49-50.

In general, the surveys conducted for academic libraries have involved only user groups. The only survey to include non-users and identify them as such was conducted in 1968 at Rennselaer Polytechnic Institute in Troy, New York. A total of 3000 students were surveyed; 239 were identified as non-users, while 1100 used the library at least "a few times". In 1970 a follow-up survey was made of 27 selected undergraduates who had participated in the earlier study and had been identified as non-users. This second survey concentrated on their attitudes toward the library.

In order to evaluate library service to academic patrons, a need exists for research which investigates the information needs and seeking patterns of both library users and non-users.

PURPOSE

It is the purpose of this study to: 1) investigate the information needs and seeking patterns of college students at one private academic institution, and 2) determine the relationship between the information needs/seeking patterns and selected socio-economic characteristics of the student population.

HYPOTHESES

Variables:

A. Dependent variables: (5 fold) never; once/month; once/week; 2-3 times/week; once/day or more.

1. Information needs.
   a. assigned reading.
   b. reserve materials.
   c. term paper materials.
   d. place to study.
   e. personal/recreational reading.
   f. meet friends.
   g. other.

2. Information gathering patterns.
   a. materials:
      i. books.
      ii. journals.
      iii. pamphlets.
      iv. maps.
      v. technical reports.
      vi. microforms.
      vii. indexes/abstracts.
      viii. card catalog.
      ix. other.
   b. services:
      i. reference service.
      ii. interlibrary loan.
      iii. conference rooms.
      iv. books on hold.
      v. search requests.

vi. other

B. Independent variables:

1. Use of other USC libraries: (2 fold)
   yes/no
2. Use of other college or univeristy libraries: (2 fold)
   yes/no
3. Use of a professor's personal library: (2 fold)
   yes/no
4. Use of the public library in the community: (2 fold)
   yes/no
5. Formal introduction to library use: (2 fold)
   yes/no
6 When was introduction given: (5 fold)
   English 101 or freshman orientation; junior high or high school; other college; grad school; date only given.
7. Where was introduction given: (4 fold)
   USC; other college; other school; non-school.
8. Seaver Library should offer instruction: (2 fold)
   yes/no
9. Would take orientation course: (2 fold)
   yes/no
10. Academic standing: (5 fold)
    freshman; sophomore; junior; senior; graduate.
11. Major: (5 fold)
    Biological Sciences; Pre-medicine; Chemistry; Pharmacy; other.
12. Grade Point Average: (5 fold)
    less than 2.0; 2.0 to 2.49; 2.5 to 2.99; 3.0 to 3.49;

3.5 or better

13. Sex: (2 fold)

male/female

14. Residence: (3 fold)

live on campus; commute; live near campus.

STATEMENT OF RELATIONSHIPS

1. There is a positive correlation between use of Seaver library and
   a. Class standing.
   b. Grade point average.
   c. Residence on campus.
   d. Instruction in library use.
2. There is a negative correlation between use of Seaver library and
   a. Sex.
   b. Use of other USC libraries.
   c. Use of other college or university libraries.
   d. Use of the public library.
   e. Use of a professor's library.

RELATED RESEARCH

Research which discusses only use of the library has been limited, since most use studies are carried out as a part of an overall library survey.

In A Survey of the Libraries of Cornell University, a section was devoted to Readers' Services and Use. A questionnaire was distributed on October 15, 1947, to all visitors to the following Libraries: University Library, Agricultural Library, Architecture, Chemical Engineering, and Home Economics libraries to determine the reasons for library use and the amount of success in obtaining materials. Approximately two-thirds of the total number of users (930) used the library for assigned reading. Other uses were for study (446), problems (185), general reading (168), stack use (106), periodicals (73), and newspapers (28).[8] Of the 1252 people who responded, 125 said they had not been successful in obtaining the materials they had sought.[9]

Dr. Louis Wilson, who had studied the libraries at Cornell University, also surveyed those of the Alabama Polytechnic Institute. A questionnaire was distributed to all people entering the library on November 10, 1948, between the hours of 8:00 a.m. and 10:00 pm.m., and were returned as the people left the library. The study was to determine the purpose for the visit to the library, the success in obtaining materials, opinion

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[8]Louis R. Wilson, Robert D. Downs, and Maurice F Tauber. A Survey of the Libraries of Cornell University. (Ithaca, New York: Cornell University, 1948), p. 101.

[9]Ibid., p. 102.

of service, and the status of the participants. A total of 719 questionnaires were returned, of which 38 were discarded due to incomplete information. A majority of the participants (482) came to the library to study with their own books, 214 to obtain general reading matter, 210 for assigned reading, 145 to read newpapers, 112 to obtain information on problems or other topics of study, and 38 for other unstated reasons.[10] A total of 257 indicated that they had been successful in obtaining the materials they were seeking, while 42 had not. Only 34 found the service fair, while 269 thought that it was good. The majority of participants were undergraduates (546), 26 were graduates, 17 were faculty, and 92 did not indicate their status.[11]

A more recent user study conducted as part of a library survey was that conducted at Johns Hopkins University in 1962. The primary purpose of this study was to construct a picture of the activities which make up a library day.[12] A questionnaire was developed and distributed Tuesday through Thursday during the weeks of 8-14 April, 29 April-5 May, and 5-12 May 1962, which were periods of routine library operation. The questionnaires were given to people entering the library and were deposited in a box at the exit of the library. Of the 2941 questionnaires collected, 1172 were analyzed in detail.[13] The questionnaires were analyzed in three groups: 613 in the Science and Engineering Group, 298 from the Main Reading Room, and 261 in the Humanities and Social Sciences Group. The results showed that: 1) a

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[10]Louis R. Wilson, and Robert W. Orr. A Survey of the Library of Alabama Polytechnic Institute. (Auburn, Alabama: Alabama Polytechnic Institute, 1949), p. 111.

[11]Ibid.

[12]Johns Hopkins University. Progress Report of an Operations Research and Systems Engineering Study of A University Library. (Baltimore: Johns Hopkins University, 1963), p. 65.

[13]Ibid., p. 58.

significant fraction of those using the library conducted both author and title searches, 2) a significant fraction of those using the library fail to find the information they seek, and 3) The "open shelf" policy was desirable.[14]

Several studies have been undertaken to determine library use without including it as a part of a survey of all library operations.

During January 5-9, 1955, a questionnaire was distributed to approximately 50% of all persons using the science library at the Massachusetts Institute of Technology to determine the attendance and use. Approximately 1900 questionnaires were used to tabulate results from a total collected of 2700. The study showed that the library was used predominantly by undergraduates for study.[15]

A study was conducted in Spring of 1962 and Fall of 1963 at Eastern Illinois University to determine patterns of student use of the library, excluding that of reserve books. Call slips were saved during the middle of the quarters and were arranged by student identification number. The number of books checked out was compared with class standing, sex, name, and grade point average.[16] More freshman (44%) than members of the other classes(35-36%) borrowed one book or more.[17] More of the better students used the library, and, the lower the G.P.A., the fewer the number of books withdrawn.[18] More women withdrew books, but the average number of books withdrawn per male student

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[14]Ibid., p. 4-5.
[15]G.C. Bush et al. "Attendance and Use of the Science Library at MIT." American Documentation 7 (April 1956): 88.
[16]Patrick Barkey. "Patterns of Student Use of a College Library." College and Research Libraries 26 (March 1965): 115.
[17]Ibid., p. 116.
[18]Ibid., p. 117

differed little from that withdrawn per female student.[19] Of the 2967 students surveyed in 1962, 1849 withdrew no books. In 1963, the number was 2318 out of a total of 3847.[20]

Research was also undertaken at Columbia University to identify and measure major user groups and services. On four separate days, all library users were asked to complete a special survey form. A total of 15,302 usable survey forms were collected. Users were asked to identify themselves)i.e. faculty, undergraduate, graduate, alumni, administrator, etc.), to indicate what library facilities they had used (e.g. tables, catalog , reference assistance, etc., and to state what kinds of material they sought.[21] Analysis was made in three sections: A. type of user by the unit of the library in which questionnaires were filled out; B. type of user by the services used; C. type of user arranged by the services used for each library unit. Results showed, for example, that Engineering graduate students were the heaviest users of the Engineering library, using four times as many nonreserve books as Engineering undergraduates, although use of reserve books was approximately equal between the two groups. In the Music library graduate students used five times as many nonreserve books as the undergraduates.[22]

The study of 27 non-users conducted at Rennselaer Polytechnic Institute in 1970 stemmed from a campus-wide census of library use conducted in 1968. This study included nearly 3000 students and showed that there was increasing levels of library use as a

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[19]Ibid.

[20]Ibid., p. 116.

[21]Ellis Mount and Paul Fasana. "An Approach to the Measurement of Use and Cost of a Large Academic research Library System: A Report of a Study Done ar Columbia University Libraries." College and Research Libraries 33 (May 1972): 200.

[22]Ibid., p. 201.

student progressed through school.[23] Participants in the 1970 study included 22 from the School of Engineering, 3 from the School of Science and 2 from the School of Management. There were 21 juniors and 6 seniors. The mathematical mean Quality Point Average (QPA) was 2.5 with a range from 1.6 to 3.4 out of a possible 4.0.

> One of the major findings of this study is that the use of the library, especially from the eyes of the non-user, is strictly course-related, and unless he is "guided" in this manner, the inspiration or the inclination or the time is not there for the student to extend himself. A subjective conclusion is that the use or non-use of the library is not based on intellectual capacity or the grade point average. (The non-user is not anti-intellectual, rather he would appear to be intellectually rather well equipped as his library user classmates.[24]

The primary result of this survey is that the library non-user is just that because he has no need to use the library.[25]

The following sources were searched for any related research:

CIJE-Current Index to Journals in Education

ERIC/CLIS Abstracts (A manual search was conducted with the descriptors Information Needs, Infomation Utilization, Library Surveys, University Libraries, and Use Studies.)

Education Index

Library Literature

RIE-Research in Education

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[23]Lubans, "On Non-use," p. 48.
[24]Ibid., p. 51.
[25]Ibid., p. 53.

METHODOLOGY

Population and Sampling Procedures

Four science classes, two graduate and two undergraduate, were selected from those having materials on reserve at Seaver Library during Spring Semester 1974. The four classes selected for analysis were: Physics 135bL "Physics for the Life Sciences," taught by Dr. Waddell; Biology 310L "Human Genetics," taught by Dr. Baker; Biology 501 "Molecular Organization and Function," taught by Dr. Petruska; and Chemistry 526b "Advanced Organic Chemistry," taught by Dr. Weber. A total of 162 students were included in this sample taken from a total enrollment of approximately 300 for these four classes.

Method of Data Collection

The data were collected in this study to determine the level of non-use among potential patrons of Seaver Science Library. Each respondant was asked to supply information about library use and selected personal characteristics.

The instrument used was a questionnaire distributed to the four science classes. The questionnaire was adapted from the structured interview/survey used at Rennselaer Polytechnic Institute in 1970. (Questions 1,4,5,7,8b,9, and 10 were used--see appendix.)

For the dependent variable previously identified, the frequency of use of Seaver library for specified information needs and use of available materials and services is to be determined. All items listed in questions 2,3, and 4 of the

questionnaire, that is, materials and services, are available at Seaver and space was allowed on the questionnaire for additional items to be written in.

The questionnaire was distributed to the four classes during the first week in May, 1974. Chemistry 526b on May 1, Biology 310L and Physics 135bL on May 2, and Biology 501 on May 6. It was handed out to the students as they entered class and collected at the end of the class period. Since the students filled out the questionnaire during the class there was no need for follow-up.

Analysis of the data

Of the approximately 180 questionnaires distributed, 163 were returned and 162 were usable.

The respondents were asked to answer questions to determine the frequency of use of Seaver Library and of available materials and services, as well as questions on selected demographic factors. All the data from the returned questionnaires were keypunched and input to the IBM 360 Computer at the Computing Center at the University of Southern California. The program employed to analyze the data was the Statistical Program for the Social Sciences (SPSS). The programm included routines for frequency analysis (CODEBOOK) and chi square analysis (CROSSTABS). The .05 probability level was used to determine significance of relationships.

FINDINGS

Frequency Distributions

Students rarely use Seaver Library to satisfy information needs related to class activities. The frequency of use for all specified categories was found to be at the level of once per month or less. (Only four people listed an additional information need in the "other" category, so this was disregarded.) The majority of students never used the library to meet friends (64.2%, Table I), for personal/recreational reading (62.3%, Table II), and term paper materials (52.5%, Table III). Of those indicating use of Seaver Library for assigned reading, 34.0% used the facilities once per month (Table IV), and 45.7% indicated the same use level for reserve materials (Table V). These higher use levels may be attributed to the fact that those classes surveyed for use patterns were selected from those having materials on reserve at Seaver.

Infrequent use was also made of the materials housed in the library. Books (Table VI) and the card catalog (Table VII) were rarely used more than once per month. The remaining materials: journals (36.4%, Table VIII), pamphlets (59.3%, Table IX), maps (76.5%, Table X), technical reports (60.5%, Table XI), microforms (73.5%, Table XII), and indexes/abstracts (49.4%, Table XIII) were almost never used by students.

The services available at Seaver were also used infrequently. Only the Xeroxing facilities were used more than once per month (Table XIV). The remaining services: reference service (50.6%, Table XV), interlibrary loan (73.5%, Table XVI), conference

rooms (70.4%, Table XVII), books on hold (43.2%, Table XVIII), and search requests (66.0%, Table XIX) were almost never used by students.

Juniors were the largest group surveyed (31.5%, Table XX), and majors in the Biological Sciences predominated (61.1%, Table XXI). The grade point average most frequently indicated was the 3.0 to 3.49 range (37.0%, Table XXII) and the sample was predominately male (70.4%, Table XXIII).

More students (81.5%, Table XXIV) used other USC campus libraries besides Seaver, but most did not use other college or university libraries (59.3%, Table XXV), even though almost half of those surveyed (48.9%, Table XXVI) commuted rather than resided on campus. Most (70.4%, Table XXVII) did not use a professor's personal library. A majority (51.9%, Table XXVIII) used the public library in their community, but not more than Seaver (Table XXIX). Only one-third of the students (38.3%) had had a formal introduction to the library (instruction in library use) (Table XXX), the instruction generally taking place at USC (23.5%, Table XXXI) during freshman orientation or English 101 (22.2%, Table XXXII). Most (58.6%) indicated that Seaver Library should offer instruction in the use of the library (Table XXXIII), but 48.1% said they would not take a free, optional course in library instruction for credit (Table XXXIV).

RELATIONSHIPS

Of the 162 students completing the questionnaire, only four indicated that they had not used Seaver Science Library during Spring Semester 1974. Because the number of those indicating non-use was so small, analysis of relationships

could not be accurately made.

The following relationships were found at the .05 probability level between the dependent variables and two selected independent variables: (x=significant relationship, 0=insignificant relationship.)

independent variables:	class	GPA
dependent variables:		
assigned reading	x	x
reserve materials	x	0
term paper materials	x	o
place to study	x	0
personal/recreational reading	x	0
meet friends	0	0
books	x	x
journals	x	x
pamphlets	x	0
maps	x	0
technical reports	x	0
microforms	0	0
indexes/abstracts	x	x
card catalog	x	x
reference service	x	x
interlibrary loan	0	0
conference rooms	0	0
books on hold	0	0
Xerox	x	x
search requests	0	x

A number of significant relationships were found at the .05 probability level between the independent variable class standing and the dependent variables: assigned reading (Table XXXV), reserve materials (Table XXXVI), books (Table XXXVII), journals (Table XXXVIII), pamphlets (Table XXXIX), indexes/abstracts (Table XL), reference service (Table XLI), card catalog (Table XLII), and Xerox (Table XLIII). For each of these, frequency of use increased with advancement in class. Although juniors formed the largest single class, use frequencies for these variables were proportionately greater for graduate students. In general,

more reliance is placed on textbooks in the freshman and sophomore years when basic subject courses are taken. More specialized sources are needed in the upper classes when a major area of study is chosen and during graduate study, when the emphasis is on research in a particular field.

The increase in frequency of use of journals directly influences the increase in the use of the Xeroxing facilities. Journals are not allowed to circulate at Seaver Library, except with the special permission of a librarian. Also access to journal articles is available primarily through indexing and abstracting sources.

There were also significant relationships between class standing and use of maps (Table XLIV), technical reports (Table XLV), place to study (Table XLVI), personal/recreational reading (Table XLVII), and term paper materials (Table XLVIII). Frequency of use of maps decreases with advancement in class. Sophomores use the library more than any other class as a place to study. Seniors have the highest frequency of use for technical reports and term paper materials.

Finally, significant relationships were found between GPA and use of assigned reading (Table IL), books (Table L), librarians to search for materials (Table LI), and Xeroxing facilities (Table LII). The card catalog was used more frequently by those with either low or high GPA (Table LIII), while use of indexes/abstracts was most frequent for the students with GPAs in the 3.0 to 3.49 range (Table LIV). The frequency of use of journals decreased with higher GPA (Table LV), as did use of reference service (Table LVI).

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Table I
Numeric and Percentage Distribution for Use of Seaver Library to Meet Friends

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE 9.	39	24.1	24.1	24.1
NEVER 1.	104	64.2	64.2	88.3
ONCE/MONTH 2.	11	6.8	6.8	95.1
ONCE/WEEK 3.	2	1.2	1.2	96.3
2-3 TIMES PER WEEK 4.	4	2.5	2.5	98.8
ONCE/DAY OR MORE 5.	2	1.2	1.2	100.0
TOTAL	162	100.0	100.0	100.0

Table II
Numeric and Percentage Distribution for Use of Seaver Library for Personal/Recreational Reading

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE 9.	35	21.6	21.6	21.6
NEVER 1.	101	62.3	62.3	84.0
ONCE/MONTH 2.	15	9.3	9.3	93.2
ONCE/WEEK 3.	6	3.7	3.7	96.9
2-3 TIMES PER WEEK 4.	2	1.2	1.2	98.1
ONCE/DAY OR MORE 5.	3	1.9	1.9	100.0
TOTAL	162	100.0	100.0	100.0

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Table III
Numeric and Percentage Distribution
for Use of Seaver Library
for Term Paper Materials

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE .	32	19.8	19.8	19.8
NEVER 1.	85	52.5	52.5	72.2
ONCE/MONTH 2.	25	15.4	15.4	87.7
ONCE/WEEK 3.	16	9.9	9.9	97.5
2-3 TIMES PER WEEK 4.	2	1.2	1.2	98.8
ONCE/DAY OR MORE 5.	2	1.2	1.2	100.0
TOTAL	162	100.0	100.0	100.0

Table IV
Numeric and Percentage Distribution
for Use of Seaver Library
for Assigned Reading

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE 0.	27	16.7	16.7	16.7
NEVER 1.	45	27.8	27.8	44.4
ONCE/MONTH 2.	55	34.0	34.0	78.4
ONCE/WEEK 3.	22	13.6	13.6	92.0
2-3 TIMES PER WEEK 4.	9	5.6	5.6	97.5
ONCE/DAY OR MORE 5.	4	2.5	2.5	100.0
TOTAL	162	100.0	100.0	100.0

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Table V
Numeric and Percentage Distribution
for Use of Seaver Library
for Reserve Materials

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE 0.	15	9.3	9.3	9.3
NEVER 1.	15	9.3	9.3	18.5
ONCE/MONTH 2.	74	45.7	45.7	64.2
ONCE/WEEK 3.	42	25.9	25.9	90.1
2-3 TIMES PER WEEK 4.	13	8.0	8.0	98.1
ONCE/DAY OR MORE 5.	3	1.9	1.9	100.0
TOTAL	162	100.0	100.0	100.0

Table VI
Numeric and Percentage Distribution
for Use of Books

VALUE	ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE 0.	19	11.7	11.7	11.7
NEVER 1.	43	26.5	26.5	38.3
ONCE/MONTH 2.	67	41.4	41.4	79.6
ONCE/WEEK 3.	20	12.3	12.3	92.0
2-3 TIMES PER WEEK 4.	12	7.4	7.4	99.4
ONCE/DAY OR MORE 5.	1	0.6	0.6	100.0
TOTAL	162	100.0	100.0	100.0

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Table VII
Numeric and Percentage Distribution for Use of the Card Catalog

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	29	17.9	17.9	17.9
NEVER	1.	47	29.0	29.0	46.9
ONCE/MONTH	2.	53	32.7	32.7	79.6
ONCE/WEEK	3.	17	10.5	10.5	90.1
2-3 TIMES PER WEEK	4.	14	8.6	8.6	98.8
ONCE/DAY OR MORE	5.	2	1.2	1.2	100.0
TOTAL		162	100.0	100.0	100.0

Table VIII
Numeric and Percentage Distribution for Use of Journals

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	17	10.5	10.5	10.5
NEVER	1.	59	36.4	36.4	46.9
ONCE/MONTH	2.	46	28.4	28.4	75.3
ONCE/WEEK	3.	23	14.2	14.2	89.5
2-3 TIMES PER WEEK	4.	14	8.6	8.6	98.1
ONCE/DAY OR MORE	5.	3	1.9	1.9	100.0
TOTAL		162	100.0	100.0	100.0

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Table IX
Numeric and Percentage Distribution for Use of Pamphlets

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	32	19.8	19.8	19.8
NEVER	1.	96	59.3	59.3	79.0
ONCE/MONTH	2.	23	14.2	14.2	93.2
ONCE/WEEK	3.	8	4.9	4.9	98.1
2-3 TIMES PER WEEK	4.	3	1.9	1.9	100.0
TOTAL		162	100.0	100.0	100.0

Table X
Numeric and Percentage Distribution for Use of Maps

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	37	22.9	22.8	22.8
NEVER	1.	124	76.5	76.5	99.4
ONCE/MONTH	2.	1	0.6	0.6	100.0
TOTAL		162	100.0	100.0	100.0

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Table XI
Numeric and Percentage Distribution for Use of Technical Reports

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	32	19.8	19.8	19.8
NEVER	1.	98	60.5	60.5	80.2
ONCE/MONTH	2.	21	13.0	13.0	93.2
ONCE/WEEK	3.	8	4.9	4.9	98.1
2-3 TIMES PER WEEK	4.	2	1.2	1.2	99.4
ONCE/DAY OR MORE	5.	1	0.6	0.6	100.0
TOTAL		162	100.0	100.0	100.0

Table XII
Numeric and Percentage Distribution for Use of Microforms

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	39	24.1	24.1	24.1
NEVER	1.	119	73.5	73.5	97.5
ONCE/MONTH	2.	4	2.5	2.5	100.0
TOTAL		162	100.0	100.0	100.0

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Table XIII
Numeric and Percentage Distribution for Use of Indexes/Abstracts

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	31	19.1	19.1	19.1
NEVER	1.	80	49.4	49.4	68.5
ONCE/MONTH	2.	31	19.1	19.1	87.7
ONCE/WEEK	3.	9	5.6	5.6	93.2
2-3 TIMES PER WEEK	4.	9	5.6	5.6	98.8
ONCE/DAY OR MORE	5.	2	1.2	1.2	100.0
TOTAL		162	100.0	100.0	100.0

Table XIV
Numeric and Percentage Distribution for Use of Xerox

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	15	9.3	9.3	9.3
NEVER	1.	27	16.7	16.7	25.9
ONCE/MONTH	2.	64	39.5	39.5	65.4
ONCE/WEEK	3.	38	23.5	23.5	88.9
2-3 TIMES PER WEEK	4.	17	10.5	10.5	99.4
ONCE/DAY OR MORE	5.	1	0.6	0.6	100.0
TOTAL		162	100.0	100.0	100.0

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Table XV
Numeric and Percentage Distribution for Use of Reference Service

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	33	20.4	20.4	20.4
NEVER	1.	82	50.6	50.6	71.0
ONCE/MONTH	2.	33	20.4	20.4	91.4
ONCE/WEEK	3.	9	5.6	5.6	96.9
2-3 TIMES PER WEEK	4.	5	3.1	3.1	100.0
TOTAL		162	100.0	100.0	100.0

Table XVI
Numeric and Percentage Distribution for Use of Interlibrary Loan

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	31	19.1	19.1	19.1
NEVER	1.	119	73.5	73.5	92.6
ONCE/MONTH	2.	10	6.2	6.2	98.8
ONCE/WEEK	3.	1	0.6	0.6	99.4
2-3 TIMES PER WEEK	4.	1	0.6	0.6	100.0
TOTAL		162	100.0	100.0	100.0

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Table XVII
Numeric and Percentage Distribution for Use of Conference Rooms

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	35	21.6	21.6	21.6
NEVER	1.	114	70.4	70.4	92.0
ONCE/MONTH	2.	8	4.9	4.9	96.9
ONCE/WEEK	3.	4	2.5	2.5	99.4
2-3 TIMES PER WEEK	4.	1	0.6	0.6	100.0
TOTAL		162	100.0	100.0	100.0

Table XVIII
Numeric and Percentage Distribution for Use of Books on Hold

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	32	19.8	19.8	19.8
NEVER	1.	70	43.2	43.2	63.0
ONCE/MONTH	2.	36	22.2	22.2	85.2
ONCE/WEEK	3.	20	12.3	12.3	97.5
2-3 TIMES PER WEEK	4.	4	2.5	2.5	100.0
TOTAL		162	100.0	100.0	100.0

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Table XIX
Numeric and Percentage Distribution for Use of Search Requests

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	39	24.1	24.1	24.1
NEVER	1.	107	66.0	66.0	90.1
ONCE/MONTH	2.	14	8.6	8.6	98.8
ONCE/WEEK	3.	2	1.2	1.2	100.0
TOTAL		162	100.0	100.0	100.0

Table XX
Numeric and Percentage Distribution for Class

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	16	9.9	9.9	9.9
FRESHMAN	1.	9	5.6	5.6	15.4
SOPHOMORE	2.	46	28.4	28.4	43.8
JUNIOR	3.	51	31.5	31.5	75.3
SENIOR	4.	26	16.0	16.0	91.4
GRADUATE	5.	14	8.6	8.6	100.0
TOTAL		162	100.0	100.0	100.0

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Table XXI
Numeric And Percentage Distribution of Major

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	14	8.6	8.6	8.6
BIOLOGICAL SCIENCES	1.	99	61.1	61.1	69.8
PRE-MED	2.	21	13.0	13.0	82.7
CHEMISTRY	3.	8	4.9	4.9	87.7
PHARMACY	4.	8	4.9	4.9	92.6
OTHER	5.	12	7.4	7.4	100.0
TOTAL		162	100.0	100.0	100.0

Table XXII
Numeric and Percentage Distribution of Grade Point Average

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	13	8.0	8.0	8.0
LESS THAN 2.0	1.	1	0.6	0.6	8.6
2.0 TO 2.49	2.	9	5.6	5.6	14.2
2.5 TO 2.99	3.	26	16.0	16.0	30.2
3.0 TO 3.49	4.	60	37.0	37.0	67.3
3.5 OR BETTER	5.	53	32.7	32.7	100.0
TOTAL		162	100.0	100.0	100.0

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Table XXIII
Numeric and Percentage Distribution of Respondents by Sex

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	14	8.6	8.6	8.6
FEMALE	1.	32	19.8	19.8	28.4
MALE	2.	114	70.4	70.4	98.8
	4.	1	0.6	0.6	99.4
	5.	1	0.6	0.6	100.0
TOTAL		162	100.0	100.0	100.0

Table XXIV
Numeric and Percentage Distribution for Use of Other USC Campus Libraries

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	13	8.0	8.0	8.0
NO	1.	96	59.3	59.3	67.3
YES	2.	52	32.1	32.1	99.4
	3.	1	0.6	0.6	100.0
TOTAL		162	100.0	100.0	100.0

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Table XXV
Numeric and Percentage Distribution
for Use of Other College or University Libraries

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	11	6.8	6.8	6.8
NO	1.	18	11.1	11.1	17.9
YES	2.	132	81.5	81.5	99.4
	3.	1	0.6	0.6	100.0
TOTAL		162	100.0	100.0	100.0

Table XXVI
Numeric and Percentage Distribution
for Student Residence

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	15	9.3	9.3	9.3
LIVE ON CAMPUS	1.	66	40.7	40.7	50.0
COMMUTE	2.	78	48.1	48.1	98.1
LIVE NEAR CAMPUS	3.	3	1.9	1.9	100.0
TOTAL		162	100.0	100.0	100.0

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Table XXVII
Numeric and Percentage Distribution
for Use of a Professor's Library

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	11	6.8	6.8	6.8
NO	1.	114	70.4	70.4	77.2
YES	2.	36	22.2	22.2	99.4
	3.	1	0.6	0.6	100.0
TOTAL		162	100.0	100.0	100.0

Table XXVIII
Numeric and Percentage Distribution
for Use of Public Library

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	11	6.8	6.8	6.8
NO	1.	67	41.4	41.4	48.1
YES	2.	84	51.9	51.9	100.0
TOTAL		162	100.0	100.0	100.0

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Table XXIX
Numeric and Percentage Distribution
for Frequency of Use of the Public Library

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	74	45.7	45.7	45.7
LESS THAN USE SEMIN	1.	70	43.2	43.2	88.9
MORE THAN USE SEMIN	2.	18	11.1	11.1	100.0
TOTAL		162	100.0	100.0	100.0

Table XXX
Numeric and Percentage Distribution
for Existance of Library Instruction

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	79	48.8	48.8	48.8
NO	1.	21	13.0	13.0	61.7
YES	2.	62	38.3	38.3	100.0
TOTAL		162	100.0	100.0	100.0

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Table XXXI
Numeric and Percentage Distribution for Time of Library Instruction

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	97	59.9	59.9	59.9
BUILT IN OR PERIPHERAL ORIENTATION	1.	36	22.2	22.2	82.1
JUNIOR (HIGH OR HIGH SCHOOL	2.	18	11.1	11.1	93.2
GRADUATE SCHOOL	3.	9	5.6	5.6	98.9
DATE ONLY GIVEN	5.	2	1.2	1.2	100.0
TOTAL		162	100.0	100.0	100.0

Table XXXII
Numeric and Percentage Distribution for Location of Library Instruction

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	100	61.7	61.7	61.7
USC	1.	38	23.5	23.5	85.2
OTHER COLLEGE	2.	6	3.7	3.7	88.9
OTHER SCHOOL	3.	15	9.3	9.3	98.1
PUBLIC SCHOOL	4.	2	1.2	1.2	99.4
	5.	1	0.6	0.6	100.0
TOTAL		162	100.0	100.0	100.0

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Table XXXIII
Numeric and Percentage Distribution for Library Instruction at Seaver Library

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	28	17.3	17.3	17.3
NO	1.	39	24.1	24.1	41.4
YES	2.	95	58.6	58.6	100.0
TOTAL		162	100.0	100.0	100.0

Table XXXIV
Numeric and Percentage Distribution for a Class Offered in Library Instruction

VALUE		ABSOLUTE FREQUENCY	RELATIVE FREQUENCY (PERCENT)	ADJUSTED FREQUENCY (PERCENT)	CUMULATIVE ADJ FREQ (PERCENT)
NO RESPONSE	0.	31	19.1	19.1	19.1
NO	1.	78	48.1	48.1	67.3
YES	2.	52	32.1	32.1	99.4
	5.	1	0.6	0.6	100.0
TOTAL		162	100.0	100.0	100.0

Table XXXV
Chi Square Analysis Between Class and Assigned Reading

VAR037 CLASS	VAR003 ASSIGNED READING	0. NO RESPONSE	1. NEVER	2. ONCE/MONTH	3. ONCE/WEEK	4. 2-3 TIMES PER WEEK	5. ONCE/DAY OR MORE	ROW TOTAL
0. NO RESPONSE	COUNT	8	2	5	1	0	0	16
	ROW PCT	50.0	12.5	31.3	6.3	0.0	0.0	9.9
	COL PCT	29.6	4.4	9.1	4.5	0.0	0.0	
	TOT PCT	4.9	1.2	3.1	0.6	0.0	0.0	
1. FRESHMAN	COUNT	0	5	3	1	0	0	9
	ROW PCT	0.0	55.6	33.3	11.1	0.0	0.0	5.6
	COL PCT	0.0	11.1	5.5	4.5	0.0	0.0	
	TOT PCT	0.0	3.1	1.9	0.6	0.0	0.0	
2. SOPHOMORE	COUNT	5	21	11	5	3	1	46
	ROW PCT	10.9	45.7	23.9	10.9	6.5	2.2	28.4
	COL PCT	18.5	46.7	20.0	22.7	33.3	25.0	
	TOT PCT	3.1	13.0	6.8	3.1	1.9	0.6	
3. JUNIOR	COUNT	7	16	19	8	2	0	51
	ROW PCT	13.7	31.4	37.3	15.7	3.9	0.0	31.5
	COL PCT	25.9	35.6	32.7	36.4	22.2	0.0	
	TOT PCT	4.3	9.9	11.1	4.9	1.2	0.0	
4. SENIOR	COUNT	5	1	14	3	2	1	26
	ROW PCT	19.2	3.8	53.8	11.5	7.7	3.8	16.0
	COL PCT	18.5	2.2	25.5	13.6	22.2	25.0	
	TOT PCT	3.1	0.6	8.6	1.9	1.2	0.6	
5. GRADUATE	COUNT	2	0	4	4	2	2	14
	ROW PCT	14.3	0.0	28.6	28.6	14.3	14.3	8.6
	COL PCT	7.4	0.0	7.3	18.2	22.2	50.0	
	TOT PCT	1.2	0.0	2.5	2.5	1.2	1.2	
COLUMN TOTAL		27	45	55	22	9	4	162
		16.7	27.9	34.0	13.6	5.6	2.5	100.0

CHI SQUARE = 54.04224 WITH 25 DEGREES OF FREEDOM

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Table XXXVI
Chi Square Analysis Between Class and Reserve Materials

VAR037 CLASS	VAR004 RESERVE MATERIALS							ROW TOTAL
	NO RESPONSE	RARELY	ONCE/MONTH	ONCE/WEEK	2-3 TIMES PER WEEK	ONCE/DAY OR MORE		
	0.	1.	2.	3.	4.	5.		
0. NO RESPONSE	0	0	6	1	1	0		8
	0.0	0.0	37.5	6.3	6.3	0.0		5.0
	50.0	0.0	8.1	2.4	7.7	0.0		
	0.0	0.0	3.7	0.6	0.6	0.0		
1. FRESHMAN	0	1	4	4	0	0		9
	0.0	11.1	44.4	44.4	0.0	0.0		5.6
	0.0	6.7	5.4	9.5	0.0	0.0		
	0.0	0.6	2.5	2.5	0.0	0.0		
2. SOPHOMORE	1	7	20	13	4	1		46
	2.2	15.2	43.5	28.3	8.7	2.2		28.4
	6.7	46.7	27.0	31.0	30.8	33.3		
	0.6	4.3	12.3	8.0	2.5	0.6		
3. JUNIOR	2	6	29	13	1	0		51
	3.9	11.8	56.9	25.5	2.0	0.0		31.5
	13.3	40.0	39.2	31.0	7.7	0.0		
	1.2	3.7	17.9	8.0	0.6	0.0		
4. SENIOR	3	0	13	7	2	1		26
	11.5	0.0	50.0	26.9	7.7	3.8		16.0
	20.0	0.0	17.6	16.7	15.4	33.3		
	1.9	0.0	8.0	4.3	1.2	0.6		
5. GRADUATE	1	1	2	4	5	1		14
	7.1	7.1	14.3	28.6	35.7	7.1		8.6
	6.7	6.7	2.7	9.5	38.5	33.3		
	0.6	0.6	1.2	2.5	3.1	0.6		
COLUMN TOTAL	15	15	74	42	13	3		162
	9.3	9.3	45.7	25.9	8.0	1.9		100.0

CHI SQUARE = 69.06361 WITH 25 DEGREES OF FREEDOM

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Table XXXVII
Chi Square Analysis Between Class and Use of Books

VAR037 CLASS	COUNT / ROW PCT / COL PCT / TOT PCT	VAR010 Books: NO RESPONSE 0.	NEVER 1.	ONCE/MONTH 2.	ONCE/WEEK 3.	2-3 TIMES PER WEEK 4.	ONCE/DAY OR MORE 5.	ROW TOTAL
0. NO RESPONSE		7	3	5	0	1	0	16
		43.8	18.8	31.3	0.0	6.3	0.0	9.9
		36.8	7.0	7.5	0.0	8.3	0.0	
		4.3	1.9	3.1	0.0	0.6	0.0	
1. FRESHMAN		0	5	4	0	0	0	9
		0.0	55.6	44.4	0.0	0.0	0.0	5.6
		0.0	11.6	6.0	0.0	0.0	0.0	
		0.0	3.1	2.5	0.0	0.0	0.0	
2. SOPHOMORE		4	16	19	6	1	0	46
		8.7	34.8	41.3	13.0	2.2	0.0	28.4
		21.1	37.2	28.4	30.0	8.3	0.0	
		2.5	9.9	11.7	3.7	0.6	0.0	
3. JUNIOR		5	14	24	6	2	0	51
		9.8	27.5	47.1	11.8	3.9	0.0	31.5
		26.3	32.6	35.8	30.0	16.7	0.0	
		3.1	8.6	14.8	3.7	1.2	0.0	
4. SENIOR		2	3	10	6	5	0	26
		7.7	11.5	38.5	23.1	19.2	0.0	16.0
		10.5	7.0	14.9	30.0	41.7	0.0	
		1.2	1.9	6.2	3.7	3.1	0.0	
5. GRADUATE		1	2	5	2	3	1	14
		7.1	14.3	35.7	14.3	21.4	7.1	8.6
		5.3	4.7	7.5	10.0	25.0	100.0	
		0.6	1.2	3.1	1.2	1.9	0.6	
COLUMN TOTAL		19	43	67	20	12	1	162
		11.7	26.5	41.4	12.3	7.4	0.6	100.0

CHI SQUARE = 52.57849 WITH 25 DEGREES OF FREEDOM

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Table XXXVIII
Chi Square Analysis Between Class and Use of Journals

VAR037 CLASS	VAR011 JOURNALS: 0. NO RESPONSE	1. NEVER	2. ONCE/MONTH	3. ONCE/WEEK	4. 2-3 TIMES PER WEEK	5. ONCE/DAY OR MORE	ROW TOTAL
0. NO RESPONSE	7	2	6	0	1	0	16
	43.8	12.5	37.5	0.0	6.3	0.0	9.9
	41.2	3.4	13.0	0.0	7.1	0.0	
	4.3	1.2	3.7	0.0	0.6	0.0	
1. FRESHMAN	0	6	2	1	0	0	9
	0.0	66.7	22.2	11.1	0.0	0.0	5.6
	0.0	10.2	4.3	4.3	0.0	0.0	
	0.0	3.7	1.2	0.6	0.0	0.0	
2. SOPHOMORE	4	30	7	5	0	0	46
	8.7	65.2	15.2	10.9	0.0	0.0	28.4
	23.5	50.8	15.2	21.7	0.0	0.0	
	2.5	18.5	4.3	3.1	0.0	0.0	
3. JUNIOR	5	20	16	8	2	0	51
	9.8	39.2	31.4	15.7	3.9	0.0	31.5
	29.4	33.9	34.8	34.8	14.3	0.0	
	3.1	12.3	9.9	4.9	1.2	0.0	
4. SENIOR	1	0	13	6	6	0	26
	3.8	0.0	50.0	23.1	23.1	0.0	16.0
	5.9	0.0	28.3	26.1	42.9	0.0	
	0.6	0.0	8.0	3.7	3.7	0.0	
5. GRADUATE	0	1	2	3	3	3	14
	0.0	7.1	14.3	21.4	35.7	21.4	8.6
	0.0	1.7	4.3	13.0	35.7	100.0	
	0.0	0.6	1.2	1.9	3.1	1.9	
COLUMN TOTAL	17	59	46	23	14	3	162
	10.5	36.4	28.4	14.2	8.6	1.9	100.0

CHI SQUARE = 118.23444 WITH 25 DEGREES OF FREEDOM

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Table XXXIX
Chi Square Analysis Between Class and Use of Pamphlets

VAR037 CLASS	VAR012 PAMPHLETS	NO RESPONSE 0.	NEVER 1.	ONCE/MONTH 2.	ONCE/WEEK 3.	2-3 TIMES PER WEEK 4.	ROW TOTAL
0. NO RESPONSE	COUNT	9	3	4	0	0	16
	ROW PCT	56.3	18.8	25.0	0.0	0.0	9.9
	COL PCT	28.1	3.1	17.4	0.0	0.0	
	TOT. PCT	5.6	1.9	2.5	0.0	0.0	
1. FRESHMAN	COUNT	1	5	2	0	0	9
	ROW PCT	11.1	55.7	22.2	0.0	0.0	5.6
	COL PCT	3.1	5.3	8.7	0.0	0.0	
	TOT. PCT	0.6	3.7	1.2	0.0	0.0	
2. SOPHOMORE	COUNT	4	31	4	3	0	46
	ROW PCT	8.7	67.4	17.4	6.5	0.0	28.4
	COL PCT	12.5	32.3	34.8	37.5	0.0	
	TOT. PCT	2.5	19.1	4.9	1.9	0.0	
3. JUNIOR	COUNT	9	34	5	3	0	51
	ROW PCT	17.6	66.7	9.8	5.9	0.0	31.5
	COL PCT	28.1	35.4	21.7	37.5	0.0	
	TOT. PCT	5.6	21.0	3.1	1.9	0.0	
4. SENIOR	COUNT	5	14	4	2	1	26
	ROW PCT	19.2	53.8	15.4	7.7	3.8	16.0
	COL PCT	15.6	14.6	17.4	25.0	33.3	
	TOT. PCT	3.1	8.6	2.5	1.2	0.6	
5. GRADUATE	COUNT	4	8	0	0	2	14
	ROW PCT	28.6	57.1	0.0	0.0	14.3	8.6
	COL PCT	12.5	8.3	0.0	0.0	66.7	
	TOT. PCT	2.5	4.9	0.0	0.0	1.2	
COLUMN TOTAL		32	96	23	8	3	162
		19.8	59.3	14.2	4.9	1.9	100.0

CHI SQUARE = 42.20177 WITH 20 DEGREES OF FREEDOM

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Table XL
Chi Square Analysis Between
Class and Use of Indexes/Abstracts

VAR037 CLASS	COUNT / ROW PCT / COL PCT / TOT PCT	VAR016 INDEXES/ABSTRACTS: NO RESPONSE 0.	NEVER 1.	ONCE/MONTH 2.	ONCE/WEEK 3.	2-3 TIMES PER WEEK 4.	ONCE/DAY OR MORE 5.	ROW TOTAL
0. NO RESPONSE		4	5	2	0	0	0	11
		36.3	31.3	12.5	0.0	0.0	0.0	3.9
		20.0	2.3	6.5	0.0	0.0	0.0	
		5.6	3.1	1.2	0.0	0.0	0.0	
1. FRESHMAN		0	7	2	0	0	0	9
		0.0	77.8	22.2	0.0	0.0	0.0	5.6
		0.0	8.8	6.5	0.0	0.0	0.0	
		0.0	4.3	1.2	0.0	0.0	0.0	
2. SOPHOMORE		5	32	7	1	0	1	46
		10.9	69.6	15.2	2.2	0.0	2.2	28.4
		16.1	40.0	22.6	11.1	0.0	50.0	
		3.1	19.8	4.3	0.6	0.0	0.6	
3. JUNIOR		9	30	8	4	0	0	51
		17.6	58.8	15.7	7.8	0.0	0.0	31.5
		29.0	37.5	25.8	44.4	0.0	0.0	
		5.6	18.5	4.9	2.5	0.0	0.0	
4. SENIOR		5	4	9	3	5	0	26
		23.1	15.4	30.8	11.5	19.2	0.0	16.0
		16.4	5.0	25.8	33.3	55.6	0.0	
		3.7	2.5	4.9	1.9	3.1	0.0	
5. GRADUATE		2	2	4	1	4	1	14
		14.3	14.3	28.6	7.1	28.6	7.1	8.6
		6.5	2.5	12.9	11.1	44.4	50.0	
		1.2	1.2	2.5	0.6	2.5	0.6	
COLUMN TOTAL		31	80	31	9	9	2	162
		19.1	49.4	19.1	5.6	5.6	1.2	100.0

CHI SQUARE = 74.72145 WITH 25 DEGREES OF FREEDOM

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Table XLI
Chi Square Analysis Between
Class and Use of Reference Service

VAR037 CLASS	VAR019 REFERENCE SERVICE						ROW TOTAL
COUNT / ROW PCT / COL PCT / TOT PCT	0. NO RESPONSE	1. NEVER	2. ONCE/MONTH	3. ONCE/WEEK	4. 2-3 TIMES PER WEEK		
0. NO RESPONSE	9	4	3	0	0		16
	56.3	25.0	18.8	0.0	0.0		9.9
	27.3	4.9	9.1	0.0	0.0		
	5.6	2.5	1.9	0.0	0.0		
1. FRESHMAN	1	7	1	0	0		9
	11.1	77.8	11.1	0.0	0.0		5.6
	3.0	8.5	3.0	0.0	0.0		
	0.6	4.3	0.6	0.0	0.0		
2. SOPHOMORE	6	30	7	3	0		46
	13.0	65.2	15.2	6.5	0.0		28.4
	18.2	36.6	21.2	33.3	0.0		
	3.7	18.5	4.3	1.9	0.0		
3. JUNIOR	11	25	11	4	0		51
	21.6	49.0	21.6	7.8	0.0		31.5
	33.3	30.5	33.3	44.4	0.0		
	6.8	15.4	6.8	2.5	0.0		
4. SENIOR	5	10	8	0	3		26
	19.2	38.5	30.8	0.0	11.5		16.0
	15.2	12.2	24.2	0.0	60.0		
	3.1	6.2	4.9	0.0	1.9		
5. GRADUATE	1	6	3	2	2		14
	7.1	42.9	21.4	14.3	14.3		8.6
	3.0	7.3	9.1	22.2	40.0		
	0.6	3.7	1.9	1.2	1.2		
COLUMN TOTAL	33	82	33	9	5		162
	20.4	50.6	20.4	5.6	3.1		100.0

CHI SQUARE = 42.43896 WITH 20 DEGREES OF FREEDOM

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Table XLII
Chi Square Analysis Between
Class and Use of the Card Catalog

VAR037 CLASS	VAR017 CARD CATALOG: 0. NO RESPONSE	1. NEVER	2. ONCE/MONTH	3. ONCE/WEEK	4. 2-3 TIMES PER WEEK	5. ONCE/DAY OR MORE	ROW TOTAL
0. NO RESPONSE	10	3	3	0	0	0	16
	62.5	18.8	18.8	0.0	0.0	0.0	9.9
	34.5	6.4	5.7	0.0	0.0	0.0	
	6.2	1.9	1.9	0.0	0.0	0.0	
1. FRESHMAN	0	4	5	0	0	0	9
	0.0	44.4	55.6	0.0	0.0	0.0	5.6
	0.0	8.5	9.4	0.0	0.0	0.0	
	0.0	2.5	3.1	0.0	0.0	0.0	
2. SOPHOMORE	5	19	17	4	1	0	46
	10.9	41.3	37.0	8.7	2.2	0.0	28.4
	17.2	40.4	32.1	23.5	7.1	0.0	
	3.1	11.7	10.5	2.5	0.6	0.0	
3. JUNIOR	8	17	17	6	3	0	51
	15.7	33.3	33.3	11.8	5.9	0.0	31.5
	27.6	36.2	32.1	35.3	21.4	0.0	
	4.9	10.5	10.5	3.7	1.9	0.0	
4. SENIOR	5	3	7	3	[illegible]	0	26
	19.2	11.5	26.9	11.5	30.8	0.0	16.0
	17.2	6.4	13.2	17.6	57.1	0.0	
	3.1	1.9	4.3	1.9	4.9	0.0	
5. GRADUATE	1	1	4	4	2	2	14
	7.1	7.1	28.6	28.6	14.3	14.3	8.6
	3.4	2.1	7.5	23.5	14.3	100.0	
	0.6	0.6	2.5	2.5	1.2	1.2	
COLUMN TOTAL	29	47	53	17	14	2	162
	17.9	29.0	32.7	10.5	8.6	1.2	100.0

CHI SQUARE = 82.20227 WITH 25 DEGREES OF FREEDOM

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Table XLIII
Chi Square Analysis Between Class and Use of Xerox

VAR037 CLASS	VAR023 XEROX	NO RESPONSE 0.	NEVER 1.	ONCE/MONTH 2.	ONCE/WEEK 3.	2-3 TIMES PER WEEK 4.	ONCE/DAY OR MORE 5.	ROW TOTAL
0. NO RESPONSE	COUNT	7	2	7	0	0	0	16
	ROW PCT	43.8	12.5	43.8	0.0	0.0	0.0	9.9
	COL PCT	46.7	7.4	10.9	0.0	0.0	0.0	
	TOT PCT	4.3	1.2	4.3	0.0	0.0	0.0	
1. FRESHMAN	COUNT	0	5	3	0	1	0	9
	ROW PCT	0.0	55.6	33.3	0.0	11.1	0.0	5.6
	COL PCT	0.0	18.5	4.7	0.0	5.9	0.0	
	TOT PCT	0.0	3.1	1.9	0.0	0.6	0.0	
2. SOPHOMORE	COUNT	2	10	20	10	3	1	46
	ROW PCT	4.3	21.7	43.5	21.7	6.5	2.2	28.4
	COL PCT	13.3	37.0	31.3	26.3	17.6	100.0	
	TOT PCT	1.2	6.2	12.3	6.2	1.9	0.6	
3. JUNIOR	COUNT	4	8	23	11	5	0	51
	ROW PCT	7.8	15.7	45.1	21.6	9.8	0.0	31.5
	COL PCT	26.7	29.6	35.9	28.9	29.4	0.0	
	TOT PCT	2.5	4.9	14.2	6.8	3.1	0.0	
4. SENIOR	COUNT	2	1	7	12	4	0	26
	ROW PCT	7.7	3.8	26.9	46.2	15.4	0.0	16.0
	COL PCT	13.3	3.7	10.9	31.6	23.5	0.0	
	TOT PCT	1.2	0.6	4.3	7.4	2.5	0.0	
5. GRADUATE	COUNT	0	1	4	5	4	0	14
	ROW PCT	0.0	7.1	28.6	35.7	28.6	0.0	8.6
	COL PCT	0.0	3.7	6.3	13.2	23.5	0.0	
	TOT PCT	0.0	0.6	2.5	3.1	2.5	0.0	
COLUMN TOTAL		15	27	64	38	17	1	162
		9.3	16.7	39.5	23.5	10.5	0.6	100.0

CHI SQUARE = 61.15311 WITH 25 DEGREES OF FREEDOM

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Table XLIV
Chi Square Analysis Between Class and Use of Maps

VAR037 CLASS	VAR013 MAPS			
COUNT / ROW PCT / COL PCT / TOT PCT	0. NO RESPONSE	1. NEVER	2. ONCE/MONTH	ROW TOTAL
0. NO RESPONSE	10 / 62.5 / 27.0 / 6.2	6 / 37.5 / 4.8 / 3.7	0 / 0.0 / 0.0 / 0.0	16 / 9.9
1. FRESHMAN	0 / 0.0 / 0.0 / 0.0	9 / 100.0 / 7.3 / 5.6	0 / 0.0 / 0.0 / 0.0	9 / 5.6
2. SOPHOMORE	4 / 8.7 / 10.8 / 2.5	41 / 89.1 / 33.1 / 25.3	1 / 2.2 / 100.0 / 0.6	46 / 28.4
3. JUNIOR	9 / 17.6 / 24.3 / 5.6	42 / 82.4 / 33.9 / 25.9	0 / 0.0 / 0.0 / 0.0	51 / 31.5
4. SENIOR	10 / 38.5 / 27.0 / 6.2	16 / 61.5 / 12.9 / 9.9	0 / 0.0 / 0.0 / 0.0	26 / 16.0
5. GRADUATE	4 / 28.6 / 10.8 / 2.5	10 / 71.4 / 8.1 / 6.2	0 / 0.0 / 0.0 / 0.0	14 / 8.6
COLUMN TOTAL	37 / 22.8	124 / 76.5	1 / 0.6	162 / 100.0

CHI SQUARE = 29.03012 WITH 10 DEGREES OF FREEDOM

Table XLV
Chi Square Analysis Between
Class and Use of Technical Reports

VAR037 CLASS	VAR014 TECHNICAL REPORTS							ROW TOTAL
COUNT / ROW PCT / COL PCT / TOT PCT	NO RESPONSE 0.	NUBER 1.	ONCE/MONTH 2.	ONCE/WEEK 3.	2-3 TIMES PER WEEK 4.	ONCE/DAY OR MORE 5.		
0. NO RESPONSE	10	9	0	0	0	0		19
	62.5	37.5	0.0	0.0	0.0	0.0		9.9
	31.3	6.1	0.0	0.0	0.0	0.0		
	6.2	3.7	0.0	0.0	0.0	0.0		
1. FRESHMAN	0	9	0	0	0	0		9
	0.0	100.0	0.0	0.0	0.0	0.0		5.6
	0.0	9.2	0.0	0.0	0.0	0.0		
	0.0	5.6	0.0	0.0	0.0	0.0		
2. SOPHOMORE	4	36	5	1	0	0		46
	8.7	78.3	10.9	2.2	0.0	0.0		28.4
	12.5	36.7	23.8	12.5	0.0	0.0		
	2.5	22.2	3.1	0.6	0.0	0.0		
3. JUNIOR	8	33	7	3	0	0		51
	15.7	64.7	13.7	5.9	0.0	0.0		31.5
	25.0	33.7	33.3	37.5	0.0	0.0		
	4.9	20.4	4.3	1.9	0.0	0.0		
4. SENIOR	9	7	9	3	1	0		26
	23.1	26.9	34.6	11.5	3.8	0.0		16.0
	18.8	7.1	42.9	37.5	50.0	0.0		
	3.7	4.3	5.6	1.9	0.6	0.0		
5. GRADUATE	4	7	0	1	1	1		14
	28.6	50.0	0.0	7.1	7.1	7.1		8.6
	12.5	7.1	0.0	12.5	50.0	100.0		
	2.5	4.3	0.0	0.6	0.6	0.6		
COLUMN TOTAL	32	98	21	8	2	1		162
	19.8	60.5	13.0	4.9	1.2	0.6		100.0

CHI SQUARE = 68.49805 WITH 20 DEGREES OF FREEDOM

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Table XLVI
Chi Square Analysis Between Class and Use of the Library as a Place to Study

VAR037 CLASS	COUNT / ROW PCT / COL PCT / TOT PCT	VAR006 PLACE TO STUDY: NO RESPONSE (0.)	NEVER (1.)	ONCE/MONTH (2.)	ONCE/WEEK (3.)	2-3 TIMES PER WEEK (4.)	ONCE/DAY OR MORE (5.)	ROW TOTAL
0. NO RESPONSE		5	3	2	4	2	0	16
		31.3	18.8	12.5	25.0	12.5	0.0	9.9
		22.7	6.1	6.3	18.2	7.4	0.0	
		3.1	1.9	1.2	2.5	1.2	0.0	
1. FRESHMAN		0	5	2	2	0	0	9
		0.0	55.6	22.2	22.2	0.0	0.0	5.6
		0.0	10.2	6.3	9.1	0.0	0.0	
		0.0	3.1	1.2	1.2	0.0	0.0	
2. SOPHOMORE		3	13	14	5	10	1	46
		6.5	28.3	30.4	10.9	21.7	2.2	28.4
		13.6	26.5	43.8	22.7	37.0	10.0	
		1.9	8.0	8.6	3.1	6.2	0.6	
3. JUNIOR		9	14	9	9	8	2	51
		17.6	27.5	17.6	17.6	15.7	3.9	31.5
		40.9	28.6	28.1	40.9	29.6	20.0	
		5.6	8.6	5.6	5.6	4.9	1.2	
4. SENIOR		3	9	3	2	6	3	26
		11.5	34.6	11.5	7.7	23.1	11.5	16.0
		13.6	18.4	9.4	9.1	22.2	30.0	
		1.9	5.6	1.9	1.2	3.7	1.9	
5. GRADUATE		2	5	2	0	1	4	14
		14.3	35.7	14.3	0.0	7.1	28.6	8.6
		9.1	10.2	6.3	0.0	3.7	40.0	
		1.2	3.1	1.2	0.0	0.6	2.5	
COLUMN TOTAL		22	49	32	22	27	10	162
		13.6	30.2	19.8	13.6	16.7	6.2	100.0

CHI SQUARE = 39.73943 WITH 25 DEGREES OF FREEDOM

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Table XLVII
Chi Square Analysis Between Class and Personal/Recreational Reading

VAR037 CLASS	VAR037 PERSONAL / RECREATIONAL READING							ROW TOTAL
COUNT / ROW PCT / COL PCT / TOT PCT	0. NO RESPONSE	1. NEVER	2. ONCE/MONTH	3. ONCE/WEEK	4. 2-3 TIMES PER WEEK	5. ONCE/DAY OR MORE		
0. NO RESPONSE	5	7	1	0	0	0		16
	50.0	43.8	6.3	0.0	0.0	0.0		9.9
	22.7	9.9	6.7	0.0	0.0	0.0		
	4.9	4.3	0.6	0.0	0.0	0.0		
1. FRESHMAN	0	9	0	0	0	0		9
	0.0	100.0	0.0	0.0	0.0	0.0		5.6
	0.0	8.9	0.0	0.0	0.0	0.0		
	0.0	5.6	0.0	0.0	0.0	0.0		
2. SOPHOMORE	7	34	4	1	0	0		46
	15.2	73.9	8.7	2.2	0.0	0.0		28.4
	20.0	33.7	26.7	16.7	0.0	0.0		
	4.3	21.0	2.5	0.6	0.0	0.0		
3. JUNIOR	11	33	6	1	0	0		51
	21.6	64.7	11.8	2.0	0.0	0.0		31.5
	31.4	32.7	40.0	16.7	0.0	0.0		
	6.8	20.4	3.7	0.6	0.0	0.0		
4. SENIOR	4	11	4	4	1	2		26
	15.4	42.3	15.4	15.4	3.8	7.7		16.0
	11.4	10.9	26.7	66.7	50.0	66.7		
	2.5	6.8	2.5	2.5	0.6	1.2		
5. GRADUATE	5	7	0	0	1	1		14
	35.7	50.0	0.0	0.0	7.1	7.1		8.6
	14.3	6.9	0.0	0.0	50.0	33.3		
	3.1	4.3	0.0	0.0	0.6	0.6		
COLUMN TOTAL	35	101	15	6	2	3		162
	21.6	62.3	9.3	3.7	1.2	1.9		100.0

CHI SQUARE = 48.02237 WITH 25 DEGREES OF FREEDOM

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Table XLVIII
Chi Square Analysis Between
Class and Use of Term Paper Materials

VAR037 CLASS	COUNT / ROW PCT / COL PCT / TOT PCT	VAR005 TERM PAPER MATERIALS 0. NO RESPONSE	1. NEVER	2. ONCE/MONTH	3. ONCE/WEEK	4. 2-3 TIMES PER WEEK	5. ONCE/DAY OR MORE	ROW TOTAL
0. NO RESPONSE		9	4	3	0	0	0	16
		56.3	25.0	18.8	0.0	0.0	0.0	9.9
		28.1	4.7	12.0	0.0	0.0	0.0	
		5.6	2.5	1.9	0.0	0.0	0.0	
1. FRESHMAN		0	3	1	0	0	0	4
		0.0	75.0	11.1	0.0	0.0	0.0	2.5
		0.0	3.4	4.0	0.0	0.0	0.0	
		0.0	1.9	0.6	0.0	0.0	0.0	
2. SOPHOMORE		6	34	4	1	1	0	46
		13.0	73.9	8.7	2.2	2.2	0.0	28.4
		18.8	40.0	16.0	6.3	50.0	0.0	
		3.7	21.0	2.5	0.6	0.6	0.0	
3. JUNIOR		9	20	6	7	0	0	51
		17.6	39.2	11.8	13.7	0.0	0.0	31.5
		28.1	23.1	24.0	43.8	0.0	0.0	
		5.6	12.3	3.7	4.3	0.0	0.0	
4. SENIOR		3	7	9	6	0	1	26
		11.5	26.9	34.6	23.1	0.0	3.8	16.0
		9.4	8.2	36.0	37.5	0.0	50.0	
		1.9	4.3	5.6	3.7	0.0	0.6	
5. GRADUATE		5	3	2	2	1	1	14
		35.7	21.4	14.3	14.3	7.1	7.1	8.6
		15.6	3.5	8.0	12.5	50.0	50.0	
		3.1	1.2	1.2	1.2	0.6	0.6	
COLUMN TOTAL		32	85	25	16	2	2	162
		19.8	52.5	15.4	9.9	1.2	1.2	100.0

CHI SQUARE = 62.56357 WITH 25 DEGREES OF FREEDOM

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Table IL
Chi Square Analysis Between
Grade Point Average and Assigned Reading

VAR030 GRADE POINT AVERAGE	COUNT / ROW PCT / COL PCT / TOT PCT	VAR003 ASSIGNED READING 0. NO RESPONSE	1. NEVER	2. ONCE/MONTH	3. ONCE/WEEK	4. 2-3 TIMES PER WEEK	5. ONCE/DAY OR MORE	ROW TOTAL
0. NO RESPONSE		9	0	5	0	0	0	14
		64.3	0.0	35.7	0.0	0.0	0.0	8.6
		33.3	0.0	9.1	0.0	0.0	0.0	
		5.6	0.0	3.1	0.0	0.0	0.0	
1. LESS THAN 2.0		0	0	0	1	0	0	1
		0.0	0.0	0.0	100.0	0.0	0.0	0.6
		0.0	0.0	0.0	4.5	0.0	0.0	
		0.0	0.0	0.0	0.6	0.0	0.0	
2. 2.0 TO 2.49		2	5	2	0	0	0	9
		22.2	55.6	22.2	0.0	0.0	0.0	5.6
		7.4	11.1	3.6	0.0	0.0	0.0	
		1.2	3.1	1.2	0.0	0.0	0.0	
3. 2.5 TO 2.99		3	8	7	8	0	0	26
		11.5	30.8	26.9	30.8	0.0	0.0	16.0
		11.1	17.8	12.7	36.4	0.0	0.0	
		1.9	4.9	4.3	4.9	0.0	0.0	
4. 3.0 TO 3.49		7	18	22	9	2	2	60
		11.7	30.0	36.7	15.0	3.3	3.3	37.0
		25.9	40.0	40.0	40.9	22.2	50.0	
		4.3	11.1	13.6	5.6	1.2	1.2	
5. 3.5 OR BETTER		7	14	19	4	7	2	53
		13.2	26.4	35.8	7.5	13.2	3.3	32.7
		25.9	31.1	34.5	18.2	77.8	50.0	
		4.3	8.6	11.7	2.5	4.3	1.2	
COLUMN TOTAL		27	45	55	22	9	4	162
		16.7	27.8	34.0	13.6	5.6	2.5	100.0

CHI SQUARE = 51.94217 WITH 25 DEGREES OF FREEDOM

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Table L
Chi Square Analysis Between
Grade Point Average And Use of Books

VAR039 GRADE POINT AVERAGE	COUNT / ROW PCT / COL PCT / TOT PCT	VAR010 BOOKS 0. NO RESPONSE	1. NEVER	2. ONCE/MONTH	3. ONCE/WEEK	4. 2-3 TIMES PER WEEK	5. ONCE/DAY OR MORE	ROW TOTAL
0. NO RESPONSE		7	1	4	0	1	0	13
		53.8	7.7	30.8	0.0	7.7	0.0	8.0
		38.9	2.3	6.0	0.0	8.3	0.0	
		4.3	0.6	2.5	0.0	0.6	0.0	
1. LESS THAN 2.0		0	1	0	0	0	0	1
		0.0	100.0	0.0	0.0	0.0	0.0	0.6
		0.0	2.3	0.0	0.0	0.0	0.0	
		0.0	0.6	0.0	0.0	0.0	0.0	
2. 2.0 TO 2.49		2	5	2	0	0	0	9
		22.2	55.6	22.2	0.0	0.0	0.0	5.6
		10.5	11.6	3.0	0.0	0.0	0.0	
		1.2	3.1	1.2	0.0	0.0	0.0	
3. 2.5 TO 2.99		1	7	12	4	2	0	26
		3.8	26.9	46.2	15.4	7.7	0.0	16.0
		5.3	16.3	17.9	20.0	16.7	0.0	
		0.6	4.3	7.4	2.5	1.2	0.0	
4. 3.0 TO 3.49		6	17	25	7	4	1	60
		10.0	28.3	41.7	11.7	6.7	1.7	37.0
		31.6	39.5	37.3	35.0	33.3	100.0	
		3.7	10.5	15.4	4.3	2.5	0.6	
5. 3.5 OR BETTER		3	12	24	9	5	0	53
		5.7	22.6	45.3	17.0	9.4	0.0	32.7
		15.8	27.9	35.8	45.0	41.7	0.0	
		1.9	7.4	14.8	5.6	3.1	0.0	
COLUMN TOTAL		19	43	67	20	12	1	162
		11.7	26.5	41.4	12.3	7.4	0.6	100.0

CHI SQUARE = 30.40199 WITH 25 DEGREES OF FREEDOM

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Table LI
Chi Square Analysis Between
Grade Point Average and Search Requests

VAR024 SEARCH REQUESTS						
COUNT / ROW PCT / COL PCT / TOT PCT	NO RESPONSE 0.	NEVER 1.	ONCE/MONTH 2.	ONCE/WEEK 3.	ROW TOTAL
VAR033 GRADE POINT AVERAGE					
0. NO RESPONSE	9	4	0	0	13
	69.2	30.8	0.0	0.0	8.0
	23.1	3.7	0.0	0.0	
	5.6	2.5	0.0	0.0	
1. LESS THAN 2.0	0	0	1	0	1
	0.0	0.0	100.0	0.0	0.6
	0.0	0.0	7.1	0.0	
	0.0	0.0	0.6	0.0	
2. 2.0 TO 2.49	4	4	1	0	9
	44.4	44.4	11.1	0.0	5.6
	10.3	3.7	7.1	0.0	
	2.5	2.5	0.6	0.0	
3. 2.5 TO 2.99	6	19	0	1	26
	23.1	73.1	0.0	3.8	16.0
	15.4	17.8	0.0	50.0	
	3.7	11.7	0.0	0.6	
4. 3.0 TO 3.49	14	37	9	0	60
	23.3	61.7	15.0	0.0	37.0
	35.9	34.6	64.3	0.0	
	8.6	22.8	5.6	0.0	
5. 3.5 OR BETTER	6	43	3	1	53
	11.3	81.1	5.7	1.9	32.7
	15.4	40.2	21.4	50.0	
	3.7	26.5	1.9	0.6	
COLUMN TOTAL	39	107	14	2	162
	24.1	66.0	8.6	1.2	100.0

CHI SQUARE = 41.43625 WITH 15 DEGREES OF FREEDOM

Table LII
Chi Square Analysis Between
Grade Point Average and Use of Xerox

VAR039 GRADE POINT AVERAGE	COUNT / ROW PCT / COL PCT / TOT PCT	VAR023 XEROX 0. NO RESPONSE	1. NEVER	2. ONCE/MONTH	3. ONCE/WEEK	4. 2-3 TIMES PER WEEK	5. ONCE/DAY OR MORE	ROW TOTAL
0. NO RESPONSE		7	1	5	0	0	0	13
		53.8	7.7	38.5	0.0	0.0	0.0	8.0
		46.7	3.7	7.8	0.0	0.0	0.0	
		4.3	0.6	3.1	0.0	0.0	0.0	
1. LESS THAN 2.0		0	0	1	0	0	0	1
		0.0	0.0	100.0	0.0	0.0	0.0	0.6
		0.0	0.0	1.6	0.0	0.0	0.0	
		0.0	0.0	0.6	0.0	0.0	0.0	
2. 2.0 TO 2.49		1	4	3	1	0	0	9
		11.1	44.4	33.3	11.1	0.0	0.0	5.6
		6.7	14.8	4.7	2.6	0.0	0.0	
		0.6	2.5	1.9	0.6	0.0	0.0	
3. 2.5 TO 2.99		2	4	11	8	1	0	26
		7.7	15.4	42.3	30.8	3.8	0.0	16.0
		13.3	14.8	17.2	21.1	5.9	0.0	
		1.2	2.5	6.8	4.9	0.6	0.0	
4. 3.0 TO 3.49		5	8	26	14	6	1	60
		8.3	13.3	43.3	23.3	10.0	1.7	37.0
		33.3	29.6	40.6	36.8	35.3	100.0	
		3.1	4.9	16.0	8.6	3.7	0.6	
5. 3.5 OR BETTER		0	10	18	15	10	0	53
		0.0	18.9	34.0	28.3	18.9	0.0	32.7
		0.0	37.0	28.1	39.5	58.8	0.0	
		0.0	6.2	11.1	9.3	6.2	0.0	
COLUMN TOTAL		15	27	64	38	17	1	162
		9.3	16.7	39.5	23.5	10.5	0.6	100.0

CHI SQUARE = 54.06979 WITH 25 DEGREES OF FREEDOM

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Table LIII
Chi Square Analysis Between
Grade Point Average and
Use of the Card Catalog

VAR030 GRADE POINT AVERAGE	COUNT / ROW PCT / COL PCT / TOT PCT	VAR017 CARD CATALOG: NO RESPONSE 0.	NEVER 1.	ONCE/MONTH 2.	ONCE/WEEK 3.	2-3 TIMES PER WEEK 4.	ONCE/DAY OR MORE 5.	ROW TOTAL
0. NO RESPONSE	COUNT	9	1	3	0	0	0	13
	ROW PCT	69.2	7.7	23.1	0.0	0.0	0.0	8.0
	COL PCT	31.0	2.1	5.7	0.0	0.0	0.0	
	TOT PCT	5.6	0.6	1.9	0.0	0.0	0.0	
1. LESS THAN 2.0	COUNT	0	0	1	0	0	0	1
	ROW PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.6
	COL PCT	0.0	0.0	1.9	0.0	0.0	0.0	
	TOT PCT	0.0	0.0	0.6	0.0	0.0	0.0	
2. 2.0 TO 2.49	COUNT	3	2	4	0	0	0	9
	ROW PCT	33.3	22.2	44.4	0.0	0.0	0.0	5.6
	COL PCT	10.3	4.3	7.5	0.0	0.0	0.0	
	TOT PCT	1.9	1.2	2.5	0.0	0.0	0.0	
3. 2.5 TO 2.99	COUNT	4	8	7	4	3	0	26
	ROW PCT	15.4	30.8	26.9	15.4	11.5	0.0	16.0
	COL PCT	13.8	17.0	13.2	23.5	21.4	0.0	
	TOT PCT	2.5	4.9	4.3	2.5	1.9	0.0	
4. 3.0 TO 3.49	COUNT	11	17	17	8	6	1	60
	ROW PCT	18.3	28.3	28.3	13.3	10.0	1.7	37.0
	COL PCT	37.9	36.2	32.1	47.1	42.9	50.0	
	TOT PCT	6.8	10.5	10.5	4.9	3.7	0.6	
5. 3.5 OR BETTER	COUNT	2	19	21	5	5	1	53
	ROW PCT	3.8	35.8	39.6	9.4	9.4	1.9	32.7
	COL PCT	6.9	40.4	39.6	29.4	35.7	50.0	
	TOT PCT	1.2	11.7	13.0	5.1	3.1	0.6	
COLUMN TOTAL		29	47	53	17	14	2	162
		17.9	29.0	32.7	10.5	8.6	1.2	100.0

CHI SQUARE = 40.20220 WITH 25 DEGREES OF FREEDOM

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Table LIV
Chi Square Analysis Between
Grade Point Average and
Use of Indexes/Abstracts

VAR039 GRADE POINT AVERAGE	VAR016 INDEXES/ABSTRACTS	NO RESPONSE	ANNUAL	ONCE/MONTH	ONCE/WEEK	2-3 TIMES PER WEEK	ONCE/DAY OR MORE	ROW TOTAL
		0.	1.	2.	3.	4.	5.	
0. NO RESPONSE	COUNT	8	3	2	0	0	0	13
	ROW PCT	61.5	23.1	15.4	0.0	0.0	0.0	8.0
	COL PCT	25.8	3.8	6.5	0.0	0.0	0.0	
	TOT PCT	4.9	1.9	1.2	0.0	0.0	0.0	
1. LESS THAN 2.0	COUNT	0	0	1	0	0	0	1
	ROW PCT	0.0	0.0	100.0	0.0	0.0	0.0	0.6
	COL PCT	0.0	0.0	3.2	0.0	0.0	0.0	
	TOT PCT	0.0	0.0	0.6	0.0	0.0	0.0	
2. 2.0 TO 2.49	COUNT	2	5	2	0	0	0	9
	ROW PCT	22.2	55.6	22.2	0.0	0.0	0.0	5.6
	COL PCT	6.5	6.3	6.5	0.0	0.0	0.0	
	TOT PCT	1.2	3.1	1.2	0.0	0.0	0.0	
3. 2.5 TO 2.99	COUNT	4	15	2	4	1	0	26
	ROW PCT	15.4	57.7	7.7	15.4	3.8	0.0	16.0
	COL PCT	12.9	18.8	6.5	44.4	11.1	0.0	
	TOT PCT	2.5	9.3	1.2	2.5	0.6	0.0	
4. 3.0 TO 3.49	COUNT	13	29	9	3	4	2	60
	ROW PCT	21.7	48.3	15.0	5.0	6.7	3.3	37.0
	COL PCT	41.9	36.3	29.0	33.3	44.4	100.0	
	TOT PCT	8.0	17.9	5.6	1.9	2.5	1.2	
5. 3.5 OR BETTER	COUNT	4	28	15	2	4	0	53
	ROW PCT	7.5	52.8	28.3	3.8	7.5	0.0	32.7
	COL PCT	12.9	35.0	48.4	22.2	44.4	0.0	
	TOT PCT	2.5	17.3	9.3	1.2	2.5	0.0	
COLUMN TOTAL		31	80	31	9	9	2	162
		19.1	49.4	19.1	5.6	5.6	1.2	100.0

CHI SQUARE = 39.11357 WITH 25 DEGREES OF FREEDOM

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Table LV
Chi Square Analysis Between Grade Point Average and Use of Journals

VAR039 GRADE POINT AVERAGE	VAR011 JOURNALS: NO RESPONSE (0.)	NEVER (1.)	ONCE/MONTH (2.)	ONCE/WEEK (3.)	2-3 TIMES PER WEEK (4.)	ONCE/DAY OR MORE (5.)	ROW TOTAL
0. NO RESPONSE	5	0	5	0	1	0	13
	46.2	0.0	46.2	0.0	7.7	0.0	8.0
	35.3	0.0	13.0	0.0	7.1	0.0	
	3.7	0.0	3.7	0.0	0.6	0.0	
1. LESS THAN 2.0	0	0	0	1	0	0	1
	0.0	0.0	0.0	100.0	0.0	0.0	0.6
	0.0	0.0	0.0	4.3	0.0	0.0	
	0.0	0.0	0.0	0.6	0.0	0.0	
2. 2.0 TO 2.49	1	4	4	0	0	0	9
	11.1	44.4	44.4	0.0	0.0	0.0	5.6
	5.9	6.8	8.7	0.0	0.0	0.0	
	0.6	2.5	2.5	0.0	0.0	0.0	
3. 2.5 TO 2.99	1	9	10	5	1	0	26
	3.8	34.6	38.5	19.2	3.8	0.0	16.0
	5.9	15.3	21.7	21.7	7.1	0.0	
	0.6	5.6	6.2	3.1	0.6	0.0	
4. 3.0 TO 3.49	7	23	13	11	5	1	60
	11.7	38.3	21.7	18.3	8.3	1.7	37.0
	41.2	39.0	28.3	47.8	35.7	33.3	
	4.3	14.2	8.0	6.8	3.1	0.6	
5. 3.5 OR BETTER	2	23	13	6	7	2	53
	3.8	43.4	24.5	11.3	13.2	3.8	32.7
	11.8	39.0	28.3	26.1	50.0	66.7	
	1.2	14.2	8.0	3.7	4.3	1.2	
COLUMN TOTAL	17	59	46	23	14	3	162
	10.5	36.4	28.4	14.2	8.6	1.9	100.0

CHI SQUARE = 44.70815 WITH 25 DEGREES OF FREEDOM

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Table LVI
Chi Square Analysis Between Grade Point Average and Use of Reference Service

VA2039 GRADE POINT AVERAGE by VA2019 REFERENCE SERVICE

COUNT / ROW PCT / COL PCT / TOT PCT	NO RESPONSE (0.)	NUMBER (1.)	ONCE/MONTH (2.)	ONCE/WEEK (3.)	2-3 TIMES PER WEEK (4.)	ROW TOTAL
0. NO RESPONSE	8 / 61.5 / 24.2 / 4.9	2 / 15.4 / 2.4 / 1.2	3 / 23.1 / 9.1 / 1.9	0 / 0.0 / 0.0 / 0.0	0 / 0.0 / 0.0 / 0.0	13 / 8.0
1. LESS THAN 2.0	0 / 0.0 / 0.0 / 0.0	0 / 0.0 / 0.0 / 0.0	1 / 100.0 / 3.0 / 0.6	0 / 0.0 / 0.0 / 0.0	0 / 0.0 / 0.0 / 0.0	1 / 0.6
2. 2.0 TO 2.49	3 / 33.3 / 9.1 / 1.9	4 / 44.4 / 4.9 / 2.5	2 / 22.2 / 6.1 / 1.2	0 / 0.0 / 0.0 / 0.0	0 / 0.0 / 0.0 / 0.0	9 / 5.6
3. 2.5 TO 2.99	5 / 19.2 / 15.2 / 3.1	10 / 38.5 / 12.2 / 6.2	8 / 30.8 / 24.2 / 4.9	1 / 3.8 / 11.1 / 0.6	2 / 7.7 / 40.0 / 1.2	26 / 16.0
4. 3.0 TO 3.49	13 / 21.7 / 39.4 / 8.0	31 / 51.7 / 37.8 / 19.1	11 / 18.3 / 33.3 / 6.8	3 / 5.0 / 33.3 / 1.9	2 / 3.3 / 40.0 / 1.2	60 / 37.0
5. 3.5 OR BETTER	4 / 7.5 / 12.1 / 2.5	35 / 66.0 / 42.7 / 21.6	8 / 15.1 / 24.2 / 4.9	5 / 9.4 / 55.6 / 3.1	1 / 1.9 / 20.0 / 0.6	53 / 32.7
COLUMN TOTAL	33 / 20.4	82 / 50.6	33 / 20.4	9 / 5.6	5 / 3.1	162 / 100.0

CHI SQUARE = 34.17041 WITH 20 DEGREES OF FREEDOM

SUMMARY

This study examined the relationship between the information needs/seeking patterns and selected socio-economic characteristics of selected students enrolled in science classes at the University of Southern California during Spring Semester 1974. None of the hypothesized relationships were supported since so few in the survey indicated non-use that comparisons could not be made, but significant relationships were found to exist between the independent variables class and GPA and frequency of use of a number of the dependent variables.

A questionnaire was constructed, adapting several questions from the structured interview/survey used at Rennselaer Polytechnic Institute. The questionnaires were given to four selected science classes, two graduate and two undergraduate. The data from the returned questionnaires were keypunched and analyzed on an IBM 360 computer, utilyzing the Statistical Packsge for the Social Sciences.

From the responses given on the questionnaires, it is possible to characterize the attributes of a typical student. A typical student of the classes surveyed is male and commutes to USC. He is a junior, majoring in the Biological Sciences, and has a GPA between 3.0 and 3.49. He uses other libraries on the USC campus besides Seaver, but not the libraries of professors or other colleges or universities. He does use the public library in his community, but not more than he uses Seaver. The typical student has had a formal introduction to library use, as part of English 101 or freshman orientation at USC. He thinks Seaver should offer instruction in the use of the library, but would not

take a free optional course in library instruction for credit.

In his use of Seaver library, the typical student does assigned reading and uses reserve materials about once per month and never comes to the library for term paper materials, study, personal/recreational reading, or to meet firends. He uses books, the card catalog, and the Xerox facilities about once per month and never uses journals, pamphlets, maps, technical reports, microforms, indexes/abstracts, reference service, interlibrary loan, conference rooms, books on hold, or search requests.

Comments

In answer to question 6, those indicating that they had used other college or university libraries were asked to designate those they had used. UCLA, especially the Biomedical Library, was most frequently named (21 people). Also frequently mentioned was California State University, Los Angeles and Norris Library (USC Medical School library), both with eight responses. Also mentioned were Cal Tech and California State University, Long Beach, both with 3 and the University of California, San Diego, 2. Those named singly were El Camino College, University of California, Berkeley, University of Hawaii, Cerritos College, Occidental College, Harbor General Hospital, and Los Angeles County Hospital.

The overriding reason for use of another college or university library was the feeling that the other libraries were better or more complete, especially the journal collections. Fourteen people listed this as their reason for finding Seaver unsatisfactory. "Missing journals," "Didn't have some journals, some reports have been stolen," "Not all journals, not enough books," "More material," "Better and more complete," "Not enough books dealing with particular field though excellent for most materials needed."

In answer to question 8, those indicating that they used the public library were asked to give reasons. Six people indicated that the public library was closer or more convenient. "I live across the street," "Close when I'm at home," Other reasons included: "Easier to find needed works," "More interesting," "Has special material outside Seaver's jurisdiction."

In answer to question 10, those indicating that they would take a free optional course for credit in use of the library were asked to give reasons why they would take the class. Nine were interested only in the free credit ("It would be a Mickey,") but most seemed genuinely interested in making the library more easy for them to use. "Good to know," "Teach me something useful," "Couldn't hurt," "I could use all libraries," "To make better use of the facility," "To become better acquainted with the library and its function."

Many comments stressed saving time and finding materials more easily. "Use Seaver a lot--would like to know where everything is," "Need to know all possible sources of information," "It is essential for the scientist to be able to research to the max," "It would save lots of time and energy when looking for something," "Necessity of library use--time wasted in confusion," "Most libraries have similar systems and it would be a valuable course," "Certain aspects of an instructional course would be useful in providing a wide scope approach to searching topics."

One person did not fill out the questionnaire, but conveyed his or her feelings with this comment: "All libraries are not used by me because they are used by people to hold bullshit sessions."

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

This study was undertaken to examine the relationship between use of Seaver Science Library at the University of Southern California and selected personal characteristics of students in four selected science classes.

The four classes were selected from those having materials on reserve in Seaver library. The extremely low incidence of non-use and the higher levels of use of reserve materials and assigned reading indicates that use of Seaver library is highly course-related. This substantiates the findings of John Lubans in the study conducted at Rennselaer Polytechnic Institute and the statement by David R. Watkins that "it is now and always will be the classroom and its ideals and methods, which, by and large, determines the extent of activity at our loan desk."[26]

The study also found a strong correlation between class standing and increased use of books, journals, indexes/abstracts, reference service, and the card catalog. A factor which may influence these relationships is the increase in specialization which takes place as a student progresses through college, culminating in graduate work which emphasizes research and requires more current and up-to-date information than textbooks can provide.

Recommendations

In view of the many comments regarding the quality of the

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[26]David R. Watkins. "Some Notes on 'Orienting the Library to the User." Use, Mis-use, and Non-use of Academic Libraries. (n.p.: New York Library Association, 1970), p. 44.

journal collection, the current policies regarding journal selection and subscription should be reviewed. Perhaps the user population could be increased and better served by other titles in place of or in addition to those journals currently received.

APPENDIX 1

QUESTIONNAIRE

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LIBRARY USE QUESTIONNAIRE

This survey is being conducted to determine student use of Seaver Science Library. Your answers will help us determine what your needs are and how we can serve you better.

1. During this semester, Spring 1974, have you ever come into Seaver Library?

____no — Why not?
- ____ use another library
- ____ no class work requires library use
- ____ other reason (please specify)_____

Skip to Question 5.

____ yes — Continue with Question 2.

Please answer the following 3 questions on the basis of your activities during this semester, Spring 1974.

2. How often, on the average, do you come into Seaver Library for:

	NEVER	ONCE/ MONTH	ONCE/ WEEK	2-3 TIMES/ WEEK	ONCE/DAY OR MORE
assigned reading					
reserve materials					
term paper materials					
place to study					
personal/recreational reading					
meet friends					
other (please specify) _____					

3. How often, on the average, do you use in Seaver Library:

	NEVER	ONCE/ MONTH	ONCE/ WEEK	2-3 TIMES/ WEEK	ONCE/DAY OR MORE
books					
journals					
pamphlets					
maps					
technical reports					
microforms					
indexes or abstracts					
card catalog					
other (please specify) _____					

4. How often, on the average, do you use, in Seaver Library:

	NEVER	ONCE/ MONTH	ONCE/ WEEK	2-3 TIMES/ WEEK	ONCE/ DAY OR MORE
reference service					
interlibrary loan					
conference rooms					
books on hold					
Xerox					
search requests					
other (please specify) _____					

Please answer all the following questions on the basis of your activities during this semester, Spring 1974.

5. Have you used any other libraries at USC campus besides Seaver?
   ____ no ____ yes

6. Have you used any other college or university libraries besides those at USC?
   ____ no ____ yes Which one(s)? _____
   Why?
   ____ closer
   ____ Seaver library unsatisfactory
   Please specify: _____
   ____ other Please specify:
   _____

7. Have you used a professor's personal library?
   ____ no ____ yes

8. Have you used the public library in your community?
   ____ no ____ yes If yes, do you use the public library more than you use Seaver library?
   ____ no ____ yes If yes, please tell us why: _____

9. If you have ever had a formal introduction to the use of the library (instruction in library use), when and where did you first receive it?
   when: _____
   where: _____

10. Should Seaver library offer instruction in the use of the Library?
    ____ no ____ yes

    If it were offered for credit as a free, optional course, would you take it?
    ____ no ____ yes Why yes? _____

11. Your class is: (circle one) Fr. So. Jr. Sr. Grad

12. Your major is: _____

13. What is your cumulative grade point average?

    ____ less than 2.0
    ____ 2.0 to 2.49
    ____ 2.5 to 2.99
    ____ 3.0 to 3.49
    ____ 3.5 or better

14. Are you female? ____ or male? ____

15. Do you live on campus? ____ or commute? ____

THANK YOU VERY MUCH FOR YOUR COOPERATION
WITH YOUR HELP, WE HOPE TO MAKE SEAVER A BETTER LIBRARY

APPENDIX 2

QUESTIONNAIRE USED AT RENNSELAER POLYTECHNIC INSTITUTE

APPENDIX

RENSSELAER POLYTECHNIC INSTITUTE

LIBRARY USE

STRUCTURED INTERVIEW

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Introductory Statement to Respondent:

This interview-survey is being done with the approval of the RPI Psychology Department on the use of the Rensselaer Library -- the main Library in the Chapel Building. Essentially, the survey is to try to work out recommendations on ways the Library can be more useful to Rensselaer students. It is meant to identify your library experiences and attitudes as they may relate to the RPI Library and to libraries in general.

Your responses to this survey will be kept strictly confidential. Your name will not appear in the report of findings or in any other discussion based on this interview.

* * * * * *

1. Your school at Rensselaer is: Engr. Sci., Mngt., Hum., Arch.

   a. Your class is Fr. So. Jr. Sr. Grad.

   QPA: _____

2. If you are not a graduate student, do you intend to do graduate study? No _____ Yes _____

3. When you receive your degree, what profession will you enter?

   _____

4. Do you live on campus? _____ or commute? _____

5. Do you use other academic libraries in this area?
   No _____ Yes _____

If yes, which of these do you use?

_____ SUNY, Albany
_____ N.Y. State Library
_____ Union College
_____ Siena
_____ Russell Sage
_____ Albany Medical
_____ Hudson Valley
_____ Other

Why do you use another library?

_____ Closer
_____ RPI Library unsatisfactory...If so, explore:

_____

_____ Other reason

6. Here at RPI do you use a department's library?

No _____ Yes _____

7. Do you use a professor's personal library?

No _____ Yes _____

8a. Did your high school have a library?

No _____ Yes _____

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If yes did you use the high school library more than you use the RPI Library?

No _____ Yes _____

Was there an introduction to the use of the high school library given you?

No _____ Yes _____

8b. Did you use the public library in your community?

No _____ Yes _____

If yes, did you use the public library more than you use the RPI library?

No _____ Yes _____. If yes, please explore _____

_____

Was any library-use-instruction given you in the public library?

No _____ Yes _____

9. If you have ever had a formal introduction to the use of a library (instruction in library use), where and when was it given and how effective did you think it was?

Where _____

When _____

_____ Effective (explore)
_____ Ineffective _____
_____ Not relative _____
_____ Depend on it now

10. Should the RPI Library offer instruction in the use of the Library?

No _____ Yes _____

a. If it were for credit as an optional course, would you take it?

No _____ Yes _____

Why YES?

b. What year in a student's life at Rensselaer would you recommend giving such a course?

_____ Freshman
_____ Sophomore
_____ Junior
_____ Senior
_____ Graduate

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11. Do you know any librarians? Very briefly, what is your general opinion of them? Any experiences with librarians worth relating?

_____Helpful but not capable ------explore _____
_____stumbling blocks to knowledge
_____helpful and effective
_____professionals doing a professional job
_____do not know any

Experiences:

12. If you were assigned the job of developing a new process or a new procedure, would you be apt to consult the literature as to what had already been done?

No _____ Yes _____

If yes, would you know how to go about this?

No _____ Yes _____

Whom would you ask for guidance to find already-available information?

_____Faculty
_____Classmates
_____Librarian
_____Researchers in that field
_____Other (explore) _____

13. In your class work, have you had to use recorded information (books and magazines) to fulfill assignments?

No _____ Yes _____

If yes, where, in general, and from whom did you get the information?
Where? _____

From Whom? _____

14. Do you yourself have a collection of books which you might refer to as your personal library?

No _____ Yes _____

If yes, about how many books? _____
Any magazines or journals? _____

15. What do you think your professors, in general, think about using the Library?

_____Recommend it highly
_____Have Reserve Books there
_____Make assignments to use it
_____Are neutral or non-committal
_____Do not place too much value on it) please
_____Are opposed to it . . . . . .) explore:_____

_____

_____

16. Please give me your opinion of this quote, "The Library is the heart of the university." Do you regard it as:

_____true
_____false - explore _____
_____not applicable to RPI - explore _____

_____

_____true on some campuses
_____a nice ideal, but unrealistic

17. What do you think about this statement made by a student, "The library is a tool hall for nurds"?

_____true - explore _____
_____false
_____"nurds" are not the only users

18. Would you term some of your personal reading recreational?

_____No
_____Yes

19. When did you last read a book? (how long ago in weeks?)

_____

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20. Are you reading anything now besides assigned material?

_____No
_____Yes

If yes, what? _____

21. Do you when you read, read books all the way through, cover to cover?

_____No
_____Yes

Please explain No:

_____only after certain information
_____not enough time
_____other reasons _____

22. How would you term your pattern-of-use of the Rensselaer Library?

_____more than once a week
_____more than 8 times a semester
_____few times a semester
_____very seldom, or never

If either of first two above, in what class year did you begin to use the Rensselaer Library:

_____
(freshman, soph., Jr., Sr., graduate?)

Why? _____

If either of the last two above, what in your opinion is the reason?

_____no need
_____poor collection
_____use another library (on campus) _____

(off campus) _____
_____hate to use the place (explore) _____
_____
_____other (explore) _____
_____

BIBLIOGRAPHY

Barkey, Patrick. "Patterns of Student Use of a College Library." College and Research Libraries 26 (March 1965): 115-8.

Bush, G.C. et al. "Attendance and Use of the Science Library at MIT." American Documentation 7 (April 1956): 89-109.

Mount, Ellis and Fasana, Paul. "An Approach to the Measurement of Use and Cost of a Large Academic Research Library System: A Report of a Study Done at Columbia University Libraries." College and Research Libraries 33 (May 1972): 199-211.

New York Library Association. College and University Libraries Section. Use, Mis-use, and Non-use of Academic Libraries: Proceedings of the New York Library Association, College and University Libraries Section Spring Conference Held at Jefferson Community College, Watertown, May 1-2, 1970. n.p., New York Library Association, 1970.

Progress Report on an Operations Research and Systems Engineering Study of a University Library. Baltimore: Johns Hopkins University, 1963.

Texas University. Graduate School of Library Science. The Role of the Library in Collecting Information and Giving Service to the Serious Student and Research Worker. Austin: University of Texas. Graduate School of Library Science, 1954.

Wilson, Louis R; Downs, Robert D.; and Tauber, Maurice F. A Survey of the Libraries of Cornell University. Ithaca, New York: Cornell University, 1948.

Wilson, Louis R., and Orr, Robert W. A Survey of the Libraries of Alabama Polytechnic Institute. Auburn, Alabama: Alabama Polytechnic Institute, 1949.